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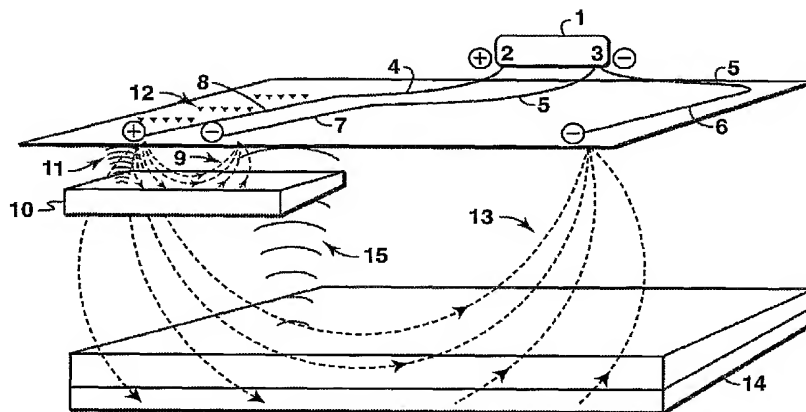
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**Declarations under Rule 4.17:**

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE,

[Continued on next page]

(54) Title: ELECTRODE CONFIGURATIONS FOR SUPPRESSION OF ELECTROSEISMIC SOURCE NOISE



(57) Abstract: Method for survey design including configuring electrodes to reduce near-surface noise in the seismic response from an electroseismic survey of a subterranean formation. Different embodiments of the invention include (1) selective measurement of the surface noise to remove it from the data; (2) suppressing surface noise generation by reducing electric fields in the vicinity of some of the electrodes; (3) creating source signature differences between the near-surface seismic response and the deep response enabling the near surface response to be removed in data processing; (4) applying an external near-surface magnetic field to modulate the near-surface seismic response, enabling it to be removed in processing; and (5) constructing a partial Faraday cage to shield a near-surface region from fields generated by the electrodes.

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